

Remarks:

Claims 1, 3, 5-10, 12-14, 16-23, and 43-51 remain for consideration in this application.

In the office action dated November 29, 2005, the Examiner indicated that claim 15 would be allowable if rewritten in independent form. Applicants have inserted the limitation of claim 15 into claim 8 and have cancelled claim 15 accordingly. Therefore, claim 8 and all claims depending therefrom are now in condition for allowance. Claim 20-23 were allowed in the last office action and remain as previously presented.

Turning now to the claim rejections, claims 1-3, 8-10, 16, 43, 44, 47, 48, 50, and 51 were rejected under 35 U.S.C. 102(b) as being anticipated by Elliott. It is the Examiner's position that Elliott is directed toward a catalyst comprising a plurality of particles wherein each particle has a porous support and an amount of a reduced nickel metal catalyst phase deposited upon the porous support and an added metal deposited upon the porous support that is separate and distinct from the nickel metal catalyst phase. The porous support is selected from the group consisting of titania, zirconia, granulated carbons, boehmite, etc. The added metal is selected from a group consisting of copper, silver, rhenium, tin, and combinations thereof.

Applicants have amended independent claim 1 by deleting the terms "metal oxides and metal hydroxides" and have substituted therefore a specific list of metal oxides which may comprise the porous first material of the claimed composition. Applicants have also deleted platinum from the second material Markush group. Elliott does not disclose using one of the presently claimed porous first materials. As noted above, the only metal oxides that Elliott uses as a porous support are titania

and zirconia, both of which are now excluded from the porous materials being claimed. Therefore, Elliott does not anticipate claim 1.

Independent claim 17 has been amended to recite “a composite” comprising a plurality of agglomerated nanoparticles selected from a particular Markush group, the composite retaining at least about 25% of the total pore volume of the particles prior to agglomeration thereof. Thus, claim 17 now recites the same limitation of claim 15 that was indicated by the Examiner as being allowable, namely the pore volume retention limitation. Elliott does not teach this feature.

Independent claim 43 has been amended to strike the term “metals” from the second material Markush group so that now claim 43 is directed toward metal cations as the second material. Similarly, independent claim 47 was amended in this fashion and also amended to add the pore volume retention limitation found in original claim 15. Elliott does not teach impregnating a support material with metal cations, but rather refers to the added metal component only in a zero-valence elemental sense. Therefore, Elliott does not enable the impregnation of a porous support material with metal cations. Applicants respectfully request that the rejections to Elliott be withdrawn.

Claims 1-3, 5-10, 12-14, and 43-50 were rejected under 35 U.S.C. 102(b) as being anticipated by Chen. It is the Examiner’s position that Chen discloses a catalytic material comprising a platinum group metal dispersed on an inorganic oxide support phase such as alumina, silica, and titania. As noted above, claim 1 has been amended to delete platinum from the second material Markush group. Therefore, there is no longer any overlap between the teachings of Chen and the composition of claim 1. Nor does Chen teach the above-discussed features of claims 17, 43 and 47, namely the pore volume retention limitation and the use of metal cations as the second material that is impregnated

within the first porous material. Applicants respectfully request that the rejection on the basis of Chen be withdrawn.

Claims 17-19 were rejected under 35 U.S.C. 102(e) as being anticipated by Park. It is the Examiner's position that Park discloses a catalyst comprising a substrate, an oxide support material deposited on the substrate, and a dopant selected from the group of metals, oxides, and combinations thereof including indium and gallium. As noted above, independent claim 17 has been amended to recite a composite comprising a plurality of agglomerated nanocrystalline particles with the composite retaining at least about 25% of the total pore volume of the particles prior to agglomeration thereof. Park does not teach a composite material comprising a plurality of agglomerated nanocrystalline particles selected from the claimed Markush group. Also, Park does not teach the presently recited pore volume retention limitation. Therefore, in view of the amendments made to claim 17, Applicants request that this rejection be withdrawn.

In view of the foregoing, a Notice of Allowance appears to be in order and such is courteously solicited.

Any additional fee which is due in connection with this amendment should be applied against our Deposit Account No. 19-0522.

Respectfully submitted,

By 

Gregory J. Skoch, Reg. No. 48,267

HOVEY WILLIAMS LLP

2405 Grand Boulevard, Suite 400

Kansas City, Missouri 64108

816/474-9050

ATTORNEYS FOR APPLICANTS